MICHIGAN HEALTH INFORMATION TECHNOLOGY COMMISSION

April 18, 2013

The Michigan Health IT Commission is an advisory Commission to the Michigan Department of Community Health and is subject to the Michigan open meetings act, 1976 PA 267, MCL 15.261 to 15.275



Agenda

- A. Welcome & Introductions
- B. Review & Approval of 03/21/2013 Meeting Minutes
- C. Dashboard Update
- D. Follow Up on Cyber Security
- E. Medicaid Health Information Technology-Develop & Maintain Strategic Plan
- F. MiHIN Shared Services- Develop & Maintain Strategic Plan
- G. Public Comment
- H. Adjourn



Dashboard Update
Meghan Vanderstelt ,MDCH
April 2013 Update





Governance

Development and Execution of Relevant Agreements

- New QO's (1-BCBSM signed), 9 total QO's
- New VQOs (CareBridge, PCE, MHIN),
- New Use Case Agreements developed (3), executed (2):
 - HPD, DIRECT, MTM developed
 - Immunizations (VXU), Admit/Discharge/Transfer (ADT)

Technology and Implementation Road Map Goals

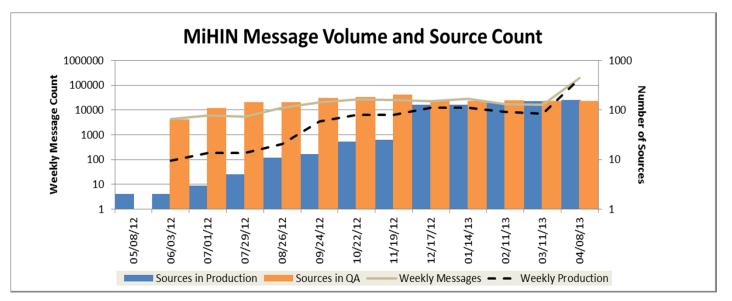
- MOAC Breach notification/accountability requirements
- FIdM Federated Identity Management pilot planning
- MiWAY Consumer Directory project planning
- Other technology project status All green

QO &VQO
Data Sharing

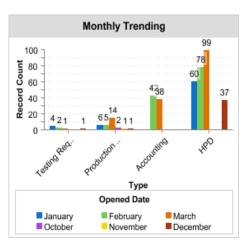
- Interstate communications MiHIN assists MI QOs with connections via Direct
- ADT Beaumont feed to BCBSM continues, BCBSM and DMC prepare for feed, MHC & Ingenium production continues

MiHIN Shared Services
Utilization

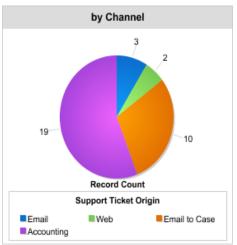
- ADT, Immunization volume crossed 1 million messages
- CCD Gateway Testing and HealthEWay Onboarding started
- Clinical Quality Measures (eCQM) pilot progress



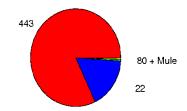
Tickets created by type



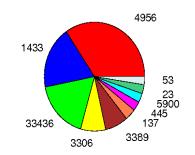
Opened Tickets MTD



Distribution of Accepted Connections



Distribution of Denied Connections



MIHIN Monday Metrics (M3) Report

MiHIN production metrics for 4/01/13	this week	last week
production messages since May 8, 2012	1188619	996473
immunizations into MCIR production	208360	203343
immunizations stopped at DQA	510160	504630
reportable labs	0	(
ADT-payers	548869	368227
ADT-syndromics	0	(
ADT-other	33234	32277
new messages since Sunday, Mar 24	192146	199901
immunizations into MCIR production	5017	5588
immunizations stopped at DQA	5530	6368
reportable labs	0	(
ADT-payers	180642	187589
ADT-syndromics	0	(
ADT-other	957	360
new sources this week	0	(
immunizations into MCIR production	0	(
reportable labs	0	(
ADT-syndromics	0	(

MiHIN on-boarding summary:

	This Week	Last Week
sources in full Production*	158	158
sources sending live HL7 data to MCIR	242	242
sources in Test/Quality Assurance	153	153
Qualified Orgs - signed QDSOA	9	9
Qualified Orgs - in MiHIN Production	3	3
Qualified Orgs - in MiHIN Testing	4	4
Qualified Orgs - pending QDSOA	2	2
virtual Qualified Orgs -signed vQOA	3	3
virtual Qualified Orgs - pending vQOA	2	2

^{*}Production is defined as a provider sending messages via a QO and MiHIN to a PH system.

MiHIN weekly help desk summary:

known issues	0
Production errors	0
Qualified Organization support	4
on-boarding and testing related	2
other	29
total	35

MiHIN security metrics:

	this week	last week
number of accepted incoming connections	218374	20230
number of denied incoming connection attempts	72509	88921
number of ICMP* attempts denied	272	272
most frequently attacked port	4956	33436

^{*} ICMP - e.g. Ping or Traceroute types of tests to access via unprotected ports

Use Case Status:

Use Case	Next Action	Status
immunization reporting (VXU)		in production via MiHIN
UCA status: GLHIE-FE, Ingenium-NS	JCMR-NS, MHC-	FE, SEMHIE-NS, UPHIE-FE, SEMBC-PR
reportable labs (ELR)		in production via MiHIN
UCA status: <u>GLHIE-FE</u> Ingenium-NS	, JCMR-NS, MHC-F	E, SEMHIE-NS, <u>UPHIE-FE.SEMBC-PR</u>
immunization query	4/23/2013	requirements review
UCA status: use case in requiremen	ts review	
ADT-syndromics	3/25/2013	build in progress
UCA status: use case agreement ap	proved by MOAC	UC WG
state lab results	3/25/2013	requirements (review new scope)
UCA status: use case in requiremen	ts gathering	
ADT-other		in production via MiHIN
UCA status: CB-FE, MHC-FE, JCMR-	PR	

NS=not signed, PR=pending review, PE=Partially executed, FE=fully executed

^{**} Attacks on port 33437 are likely attempts at seeking compromised systems



April 2013 Update

Production Updates

 MSSS - Receive Syndromic Data (implement May 2013) – Implementation continues on schedule. Work continues on the new Syndromic Message Validator being implemented for providers to test the new message structure prior to entering production. The public facing message validator guide will be released soon.

Technology

Implementation

Technology

Infrastructure Development

Meaningful Use

Specialized Registry
Development

- MPI/MCIR Real Time Integration project MCIR immunization patient demographics were loaded to the MPI (Master Person Index) in 2012. The team has been working in the development (preproduction) environment to establish the system to system communication needed to support Use Case Person Search. They have recently been able to send requests and get results back. Algorithms are now being adjusted to improve the content of the results.
- Query MCIR (Immunization) has completed Web Services changes and is now able to support Query Forecast/Query History. HL7 Message specifications were developed in 2012. MDCH Data Hub now proceeding with implementation planning.
- Cross-Enterprise Document Sharing/XDS Needed to support Record Locator Service activity for document retrieval. XDS will be needed to support CCD (Continuity of Care Document) production. CCD development work will be a larger/longer initiative so needs to precede XDS development work.
- Chronic Disease/Condition Registry This month the MDCH project sponsors met to discuss the purpose and objectives of the Chronic Disease/Condition Registry. Additional planning meetings are needed.
- Cancer Registry An initial planning meeting will be scheduled with the MDCH business owners concerning the establishment of a new HL7 message in order to receive information into the MDCH registry from local EHRs.



Current Participation Year (PY) Goals- April 2013 Update

	Reporting Status	Prior Number of Incentives Paid	Current Number of Incentives Paid	Current PY Goal Number of Incentive Payments	Current PY Medicaid Incentive Funding Expended
Eligible Provider (EPs)	AIU	775	868	1,289	\$18,090,851
	MU	219	261	586	\$2,193,003
Eligible Hospital (EHs)	AIU		2	20	\$1,000,050
	MU		7	43	\$2,786,000

Cumulative Incentives for EHR Incentive Program 2011 to Present

	Total Number of EPs & EHs Paid	Total Federal Medicaid Incentive Funding Expended
AIU	2,354	\$132,135,627
MU	413	\$33,129,517

Key: AIU= Adopt, Implement or Upgrade MU= Meaningful Use

M-CEITA MICHIGAN CENTER FOR EFFECTIVE IT ADOPTION	Number of MI Providers	Average Number of Providers (Across RECs Nationwide)	% to Michigan Goal	Average % to Goal (across RECs Nationwide)
Milestone 1 Recruitment: Number of Eligible Providers enrolled into the M-CEITA program	3,724 (+)	2,148(+)	100% (+)	100 % (+)
Milestone 2 EHR Go-Live: Number of Providers that have gone live with an EHR within their organization	3,213	1,779	86%	83%
Milestone 3 Meaningful Use Attestation: Number of Providers that have attested for Meaningful Use 04/18/2013	1,655	850	44%	40%



Clinical Transformation (CT):

Plan, implement, evaluate EHR/HIT/HIEenabled clinical interventions across health care delivery sites with an emphasis on care coordination.

- Activities include: 46 practice sites (36 min required), 117 PCPs, 16,291 diabetic patients (4000 min required), 178,353 total patients affiliated with Beacon practices for CT intervention engaged to date.
- Continue Patient Health Navigator (PHN) penetration: Current numbers: 3,787+ (2400 min required) patients referred, 1569 engaged. 2013 Goal: 4500+ referred and 1900+ engaged.
- Emergency Department Initiative: 18,029 patients screened to date; goal through 9/13 = 22,775. Goal for Q1 2013: 1350 patients/month
- Continue to expand HIT/HIE-enabled CT beyond diabetic patient population and beyond current Beacon practices through BeaconLink2Health

Information/Technology Exchange:

Plan, implement, evaluate HIE deployment with an emphasis on care coordination toward quality improvement, better population health at lower cost.

- HIE OnBoarding: Build critical mass within BeaconLink2Health (BL2H) as defined.
- Piloting EHR/HIE Integration with 23 practice sites/71 physicians which includes all FQHCs in Wayne County.
- Q2: Begin leveraging community-level XDS.b clinical data repository for population health management.
- Drive community toward the ONC 60% Meaningful Use goal.
- MiHIN pilots: Quarters Two-Four –MCIR pilots in discussion (ADT/Reportable labs.)
- Privacy and Security: Ongoing OCR HIPAA Compliance/Risk Assessment Readiness, including staff training.



Evaluation & Measurement:

Provide quarterly qualitative and quantitative data reporting to ONC for evaluation and measurement, and for PDSA cycles across interventions.

Communications & Outreach:

Brand Beacon through regular communications with key stakeholders.

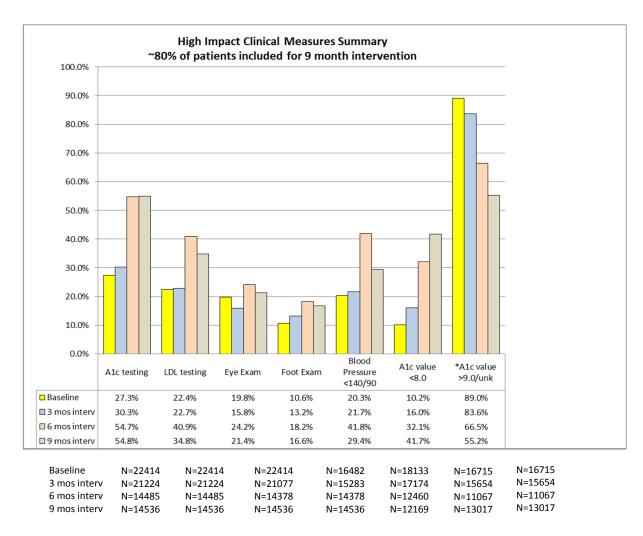
- Work with Beacon central to begin leveraging BL2H for data pulls (Pull data out of HIE for Pilot Practices.) Comparison of proportions between practice reported and HIE reported data (as HIE data are made available)
- Continue ongoing ONC reporting activities including: reporting health system, payer and provider submitted data quarterly, analyzing provider and patient surveys
- Assess for 5% improvement for high impact clinical measures compared to baselines (see attached.)
- Participate in dissemination activities with ONC and other Beacon Communities.
- Publish Quarterly Beacon Spotlight Newsletters.
- Support the launch of BeaconLink2Health.
- Txt4health evaluation in progress; scheduled for completion by the end of April.
- Multiple collaborative writing/publishing activities underway with other Beacon Communities.

Scalability, Sustainability & Research:

Develop financial sustainability model including plan for scalability. Pursue funding opportunities as appropriate.

- Implement scalability plan and sustainability strategies.
- Plan for future payment reform opportunities.
- Continue to identify and pursue funding opportunities.

Southeast Michigan Beacon Community Dashboard Quarterly High Impact Clinical Measures



^{*}Proportions reflect care documented in physician practice EHR/Registries. Per HEDIS specifications, patients not meeting numerator criteria and patients missing clinical values are categorized as non-compliant for the measure.



State Health Information Exchange Program

The Office of the National Coordinator for Health Information Technology

State HIE Program Measures Dashboard



State HIE Implementation Status:

View the implementation status of directed exchange and querybased exchange in each state

Directed Exchange Adoption:

View the number of organizations and clinical/administrative staff enabled for directed exchange in each state

Active Directed Exchange by Organization Type:

View the types of organizations actively participating in directed exchange in each state

Directed Exchange Transactions:

View the total number of directed exchange transactions by organization type in each state

Query-Based Exchange Adoption:

View the number of organizations and clinical/administrative staff enabled for query-based exchange in each state

Active Query-Based Exchange by Organization Type:

View the types of organizations actively participating in querybased exchange in each state

Query-Based Exchange Transactions:

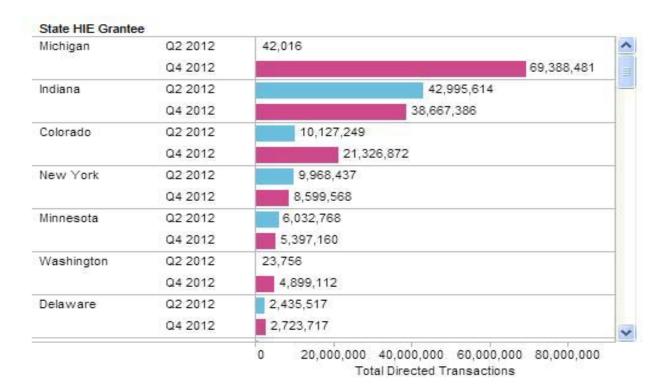
View the total number of patient record queries by organization type in each state

http://statehieresources.org/program-measures-dashboard/

Figure 9A. Total Directed Transactions

The bar chart below shows the total number of directed transactions, through State HIE grantee-funded or supported/enabled mechanisms such as HIOs, HISPs, etc., in each state during the quarterly reporting period. Transactions may fluctuate from quarter to quarter depending on many factors, some of which may be unique to the environment of each state. Data points shown as zero are a result of several possible scenarios in grantee reporting including the grantee reported zero, grantees missed reporting deadlines, measure values reported were not reliable, vendor measurement limitations, and other reporting challenges.



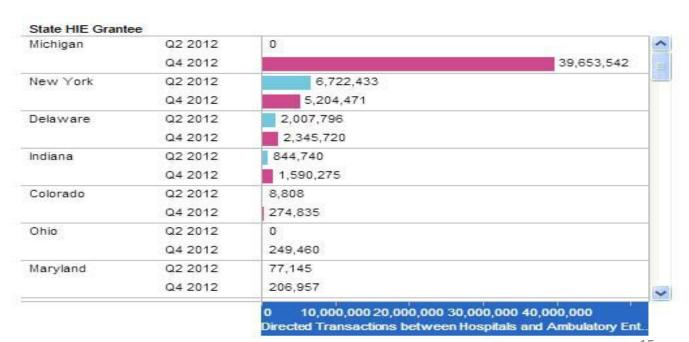


Acute Care Hospitals and Ambulatory Entities

Figure 9B. Care Coordination—Directed Transactions between Hospitals and Ambulatory Entities

The bar chart below shows the number of directed transactions, through State HIE grantee-funded or supported/enabled mechanisms such as HIOs, HISPs, etc., between hospitals and ambulatory entities in each state during the quarterly reporting period. Transactions may fluctuate from quarter to quarter depending on many factors, some of which may be unique to the environment of each state. The sum of directed transactions by organization type may not equal the total number of directed transactions, as (1) the categories for organization types are not exhaustive, and (2) some grantees may not be able to capture transaction data at a more granular level. If you are a State HIE grantee and wish to see examples of other organization types enabled for directed exchange that may account for this difference, please visit the Direct Use Case Repository on the HITRC. Data points shown as zero are a result of several possible scenarios in grantee reporting including the grantee reported zero, grantees missed reporting deadlines, measure values reported were not reliable, vendor measurement limitations, and other reporting challenges.



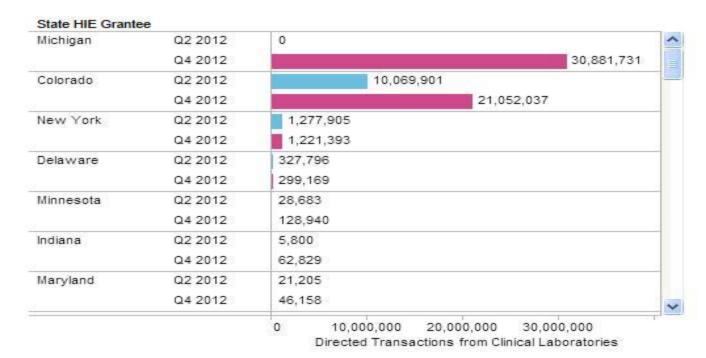


Non-Hospital Clinical Laboratories

Figure 9C. Laboratory Interoperability—Directed Transactions from Non-Hospital Clinical Laboratories

The bar chart below shows the number of directed transactions from non-hospital clinical laboratories, through State HIE grantee-funded or supported/enabled mechanisms such as HIOs, HISPs, etc., in each state during the quarterly reporting period. Transactions may fluctuate from quarter to quarter depending on many factors, some of which may be unique to the environment of each state. The sum of directed transactions by organization type may not equal the total number of directed transactions, as (1) the categories for organization types are not exhaustive, and (2) some grantees may not be able to capture transaction data at a more granular level. If you are a State HIE grantee and wish to see examples of other organization types enabled for directed exchange that may account for this difference, please visit the Direct Use Case Repository on the HITRC. Data points shown as zero are a result of several possible scenarios in grantee reporting including the grantee reported zero, grantees missed reporting deadlines, measure values reported were not reliable, vendor measurement limitations, and other reporting challenges.

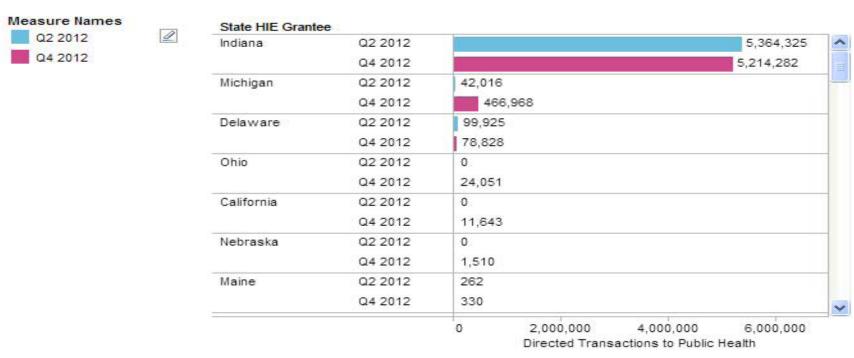




Public Health Entities

Figure 9D. Public Health Interoperability-Directed Transactions to Public Health Entities

The bar chart below shows the number of directed transactions, through State HIE grantee-funded or supported/enabled mechanisms such as HIOs, HISPs, etc., to public health entities in each state during the quarterly reporting period. Transactions may fluctuate from quarter to quarter depending on many factors, some of which may be unique to the environment of each state. The sum of directed transactions by organization type may not equal the total number of directed transactions, as (1) the categories for organization types are not exhaustive, and (2) some grantees may not be able to capture transaction data at a more granular level. If you are a State HIE grantee and wish to see examples of other organization types enabled for directed exchange that may account for this difference, please visit the Direct Use Case Repository on the HITRC. Data points shown as zero are a result of several possible scenarios in grantee reporting including the grantee reported zero, grantees missed reporting deadlines, measure values reported were not reliable, vendor measurement limitations, and other reporting challenges.



Helpful Definitions

¹Directed exchange: Point-to-point secure communication supported by the Direct Project specifications or other industry approaches to secure messaging.

²Directed transaction: Any secure message exchange between two distinct production (non-test) end points through State HIE grantee-funded or supported/enabled mechanisms (HIOs, HISPs, etc.).

³Acute care hospitals: Hospitals that provide inpatient medical care and other related services for surgery, acute medical conditions or injuries.

4Ambulatory entities: Entities/organizations that provide outpatient services, including community health centers, independent and group practices, cancer treatment centers, dialysis centers, etc.

⁵Laboratories: Non-hospital clinical laboratories.

⁶Public health entities: State, county, and/or municipal public health agencies/departments.

Follow Up on Cyber Security Chair



04/18/2013 20

Medicaid Health Information Technology MDCH Data Hub & EHR Incentive Program

Cynthia Green Edwards Medicaid HIT Director





April 18, 2013

Cynthia Green-Edwards, Director Office of Medicaid Health IT

Michigan Department of Community Health

Building a foundation to support and promote exchange of information

- **√** Funding
- **✓ EHR Incentive Program**
- ✓ Provider/Consumer Engagement
- ✓ MDCH Data Hub

□04/18/2013



State Medicaid HIT Plan (SMHP) and Advance Planning Document (APD)



State Medicaid HIT Plan (SMHP)



- State's 5 year plan for implementing the Medicaid provisions of ARRA
 - "As-Is" HIT Landscape
 - "To-Be" HIT Landscape
 - ► HIT Roadmap: How we move from As-Is to To-Be
 - Administration/Oversight of the EHR Incentive Program
 - Audit Strategy for the Incentive Program

□04/18/2013



Advanced Planning Documents (APDs)



- Request for CMS funding to
 - ▶ Implement activities described in the SMHP
 - Make incentive payments
- Implementation APDs (IAPDs)
 - 90% federal funding, 10% state match required
 - ▶ 100% federal funding for incentive payments
- ▶ HIT IAPD
 - Administration of/outreach for EHR Incentive Program
 - Consumer engagement, incl. Mi-Way Consumer Directory
 - M-CEITA funding
- MMIS IAPD
 - MI & WA are jointly developing Incentive Program system, e.g., MU reporting and tracking
 - Implementation of MDCH Data Hub, MITA SS-A, Electronic Death Record System

Q4/18/2013

MI HIT-MMIS APD History



- ▶ Planning APD (PAPD)
 - ► FY10 & FY11 funding = \$1.7 million
- ▶ Implementation APD (IAPD)
 - Submit annually with a 2 year budget
 - Includes ARRA and MMIS funding
 - FY12 funding = \$26.8 million + incentive payments
 - FY13 funding = \$34.5 million + incentive payments
 - FY14 to be submitted June 2013

HIT-MMIS IAPD Activities: Incentive Program



- 1. Development of Registration and Verification System
- 2. Development of Meaningful Use (MU) Reporting and Tracking System
- 3. Administration of program
- 4. Outreach to and Support for Providers
- 5. Provision of M-CEITA Services to 600 Michigan Specialists
- 6. Facilitating the Provision of Broadband Connections to Michigan Health Care Providers

□04/18/2013

HIT-MMIS IAPD Activities: MDCH Data Hub & Interfaces



- Implementation of MDCH Data Hub Core Shared Services & Interfaces to MI's Public Health Systems
- Statewide Rollout of the Electronic Death Registration System (EDRS) to Facilitate Reporting to Medicaid
- 9. Performing Michigan's MITA SS-A (Medicaid Information Technology Architecture State Self-Assessment)

HIT-MMIS IAPD Activities: Engaging the Consumer



- 10. Sponsoring a Consumer Engagement Specialist/Statewide Resource
- 11. Conducting a Statewide Survey of Consumers of Healthcare
- 12. Creating a Pilot "Mi-Way Consumer Directory"
 - Will eventually allow patients to store and communicate their individual preferences regarding electronic transactions
 - Parallels MPI and HPD





Medicaid EHR Incentive Program

Incentive Payments to Providers



Eligible Professionals (EP) Dashboard - As of 4/1/13



Payments (Includes AIU and MU)	
Paid	2,625
Payments	\$53,675,264
Registrations (Unique)	Est. 4,787
Awaiting Attestation	333
Awaiting State Review	292
Payment Processing	113
Cancellations/Denials	678
Paid	2,279
□04/16/2013 Registrations	3,695

Eligible Hospitals (EH) Dashboard - As of 4/1/13



Paym	ents (Includes AIU and MU)	
	Paid	147
	Payments	\$108,490,220
Registrations (Unique)		Est. 125
	Awaiting Attestation	7
Awaiting State Review		2
Cancellations/Denials		11
	Paid	93
Tot	al Registrations	113

Medicaid and Medicare Combined Payments



State	Incentives Given
Texas	\$1,016,067,226
California	\$1,014,603,784
Florida	\$870,864,919
New York	\$708,399,934
Pennsylvania	\$592,161,789
Ohio	\$531,271,133
Illinois	\$515,825,080
Michigan	\$413,211,318

As of 2/28/2013



Medicaid EHR Incentive Program



- **▶** Infrastructure Achievements
 - ► CHAMPS EHR Module Phase I, Stage II MU implemented Apr 2013
 - ▶ Phase II go-live Sep 2013 enabling providers to attest under Stage II of MU
- Medicaid Incentive payments not effected by sequestration
- Plan to submit ONC MU acceleration challenge v 2.0 with M-CEITA



Use Cases/Projects



MU Repository - Central repository to record all public health related testing for MU

Objective	Measure
16 Immunizations (Core)	Successful ongoing transmission of immunization data
3 Syndromic Surveillance (Menu)	Successful ongoing transmission of syndromic surveillance data
4 Cancer (Menu)	Successful ongoing transmission of cancer case information
5 Specialized Registry (Menu)	Successful ongoing transmission of data to specialized registry



Yes O No	
Registering As:	
Individual Professional/H	Hospital O Multiple Professionals and/or Hospitals
	Alth System are you testing for:
What Public Hea	
What Public Hea	alth System are you testing for:



Section 1 Section 2 Section 3	Section 4
Section 1: EHR Ince	entive Program Info
Are you applying for Medicaid, Medicare, or Dual?	Medicaid Medicare Dual
Are you registering as:	Provider Hospital
* NPI # of Individual Eligible Professional or Hospital NPI #:	1010101010
* Name of Individual Eligible Professional. If using Hospital NPI # add the name of the Hospital:	John Doe
CCN for Eligible Hospital (EH):	
Do you have the MU 90 day reporting period dates	● Yes ○ No
* Start Date (If unknown add the year YYYY or N/A):	04/01/2013
* End Date (If unknown add the year YYYY or N/A):	07/01/2013

MU Repository Screen Shot



Group Affiliation	NPI# CC	N MCIR ID	MU Pass Date	Follow Up Submission	Status	Approvals	
Jane Doe	000000000	00000000000	MCIR: 2/21/2012	MCIR: Yes	MCIR: Passed MDSS: MSSS:	MCIR X	



Electronic Clinical Quality Reporting (eCQM) pilot



- Small pilot underway to allow providers to electronically submit clinical quality measures through EHR to the state via DIRECT messaging
- Expand in scope following initial pilot to include more vendors
- Aligns with Trailblazers project

Provider Outreach Activities



- www.MichiganHealthIT.org
 - ▶ Website dedicated to informing providers about the Medicaid EHR Incentive Program and Michigan HIT initiative
- Information and listening sessions
 - Custom training for Beacon
 - ▶Future sessions focused on MU Stage 3
- Professional association conferences
 - ▶ Various scheduled for 2013
- Provider support by Call Center and Outreach Coordinator



Provider/Consumer Engagement



ONC's Consumer-Focused Goals



- Providing consumers with access to their health data
- Making it easier for consumers to use their health information
- Shifting attitudes about ownership of health data so physicians will be more willing to share data with patients and other health care providers

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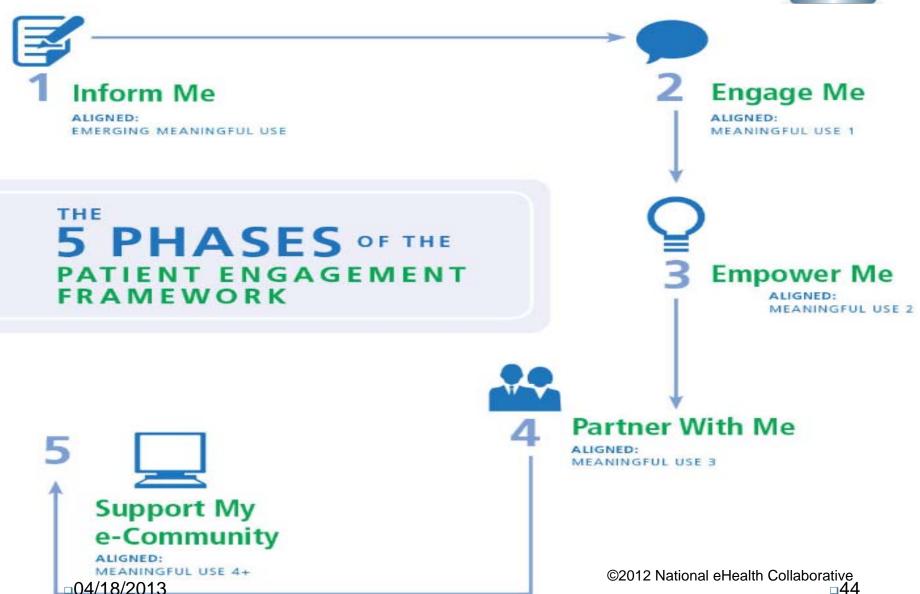
MU measures encouraging <u>Provider/Consumer</u> relationship engagement



Core Objective	Measure
9 Preventive Measures	Use EHR to identify and provide reminders for preventive/follow up care for more than 10% of patients with two or more office visits in the last 2 years
10 Patient Access	Provide online access to health information for more than 50% with more than 5% actually accessing
11 Visit Summaries	Provide office visit summaries for more than 50% of office visits
12 Education Resources	Use EHR to identify and provide education resources for more than 10% of all unique patients
13 Secure/14/2003/ages	More than 5% of patients send secure messages to 48 heir EP

The Five Stages of the Patient Engagement Framework





Example of Provider Use of HIE-HIT William F. DuBois, MD



- Eastside Family Medical, Canadian Lakes, MI
- Recently received MU payment
- Supported by M-CEITA
- Value of EHR
 - Finds patient information easier
 - Helps improve health maintenance PIP scores
 - Improves productivity able to leave office 45 minutes sooner
 - still see same number of patients per day
 - paperwork normally left for end of day is already done in the EHR
 - e-Prescribing
- ▶ Learned to use system at home before introducing to practice
- Never wants to go back to paper!

Example of Provider Use of HIE-HIT Mary (Carmen) Meerschaert, MD



- Care Free Medical Inc, Lansing
- Supported by M-CEITA
- Engages with patients
 - ▶ Patient portal on free EHR (Practice Fusion)
 - Social media presence
 - ▶ Facebook
 - **▶**Twitter
 - ▶ Practice's user friendly informational website
- Plans to interface with a free registry



Examples of Provider Use of HIE-HIT Gayatri Shanker, MD



- Partners in Pediatrics, Saginaw
 - ▶ First pediatric practice in MI to attest to MU in 2012
 - Supported by M-CEITA
- Submits to MCIR via Michigan Health Connect
- Communicates with patients via Intuit Patient Portal supported by Allscripts Pro EHR
 - Answers questions via Ask a Nurse & Ask a Biller
 - Provides clinical summary, lab results
 - ▶ Fills patient prescription requests
 - Scheduling appointments
- Interface with disease management registry Wellcentive
- Challenge patient participation 04/18/2013

Consumer Engagement Next Steps



- Identify the current HIT Consumer Engagement climate
- Collaborate with national and state Consumer Engagement initiatives
- Develop statewide survey

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MDCH Data Hub

Enhancing and Connecting State Systems



MDCH Data Hub Purpose



Connectivity and Data Exchange

- Support EHR Incentive Program and Meaningful Use and Assist in tracking and verifying provider meaningful use status
- Enable connectivity with MiHIN Shared Services and Sub-state HIEs to SOM systems
- Streamline the data flow between DCH information systems, other state systems and external partners
- Support MMIS, HIX, state and healthcare reform initiatives

▶ Infrastructure

- Rhapsody Integration Engine
- Initiate for Master Person Index and Provider Index
- TSEIM for Audit Data & Logging
- ► Future XDS to support Record Locator Service and CCD

SOM Systems



- Medicaid Systems
 - ► CHAMPS (MMIS)
 - Data Warehouse
 - **▶** MPI/PI
- Public Health Systems
 - **▶** MCIR
 - **►** MDSS
 - **►** MSSS

- Other Systems
 - Single Sign-On (SSO)
 - Bureau of Health Professions licensing database
 - Vital Records
 - Cancer Registry
 - Chronic Disease Registry (Future)

Infrastructure Achievements & Goals



 HIE must support multiple versions of standard interfaces like IHE and HL7 as well as optionally support nonstandard interfaces

Rhapsody Integration Engine

- ▶ Jun 2012 installed Specialized Enterprise Service Bus to support HL7 and other formats
- ▶ Feb 2013 all HIE traffic flowing through Rhapsody

▶ Rhapsody platform expandable

Infrastructure Achievements & Goals



- HIE must Log all transactions to an audit log for both direct push and query pull in order to be able to easily be determined <u>what data was accessed</u>.
- HIE must provide the ability to Report against Audit data.
- ► Audit Data & Logging needed to support bidirectional/query functionality

& Logging

Conducting assessment of products to meet the required log auditing, review and incident response functionality including SOM owned TSEIM.

Master Person Index For HIE



- Patient Data Locator Rule An HIE must provide the ability to locate patient records - and that means being able to index patient records.
- Data Integrity Rule The HIE must provide the ability to manage patient data by data source, and <u>not</u> <u>combine the data</u> linked by the Patient Data Locator Rule in any way that cannot be undone if the patient records are unlinked.



□04/18/2013

Master Person Index For HIE



Status

- 2012 Consolidated MDCH and DHS data sources with new data warehouse batch process
- Current Integrate in Real Time with MCIR system
 - Use Case Person Search
 - Next Use Cases:



- Use Case Person Add
- Use Case Person Update
- Use Case Person Merge/Unmerge
- 2013 plus add new data sources, working with Vital Records to integrate Legal Name changes, functionality to export deaths to other SOM systems

MPI For Analytics



- HIE must provide the ability to aggregate data (counts, sums, averages) for single patients or across multiple patients meeting a selection criteria.
 - ▶ Beyond HIE, MPI allows Medicaid and Public Health to enhance existing or build new repositories to collect information with the goal towards development of better health care policies in order to provide lower cost of health care and improved patient outcomes.
 - ▶ 2013 plus create Data Architecture Plan to coordinate and prioritize data initiatives that would enhance PH analytics. Possible projects include a Chronic Disease Registry, an ADT Repository, and increase MPI analytic functionality



Identity Management (IDM)



- ▶ MICAM Michigan Identity, Credentialing and Access Management - RFP to replace current Single Sign-On
- Identity Hub Pilot creation of the ability to do single sign-on across organizations; legal, technical, and logistical pilot



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Health Provider Directory



Directory

- An HIE must have the ability to locate a provider for push messaging
- HIE must provide the ability to control access based on patient consent and data recipient roles.

Change is a constant. Some stats on Providers:

- ▶ 20% of providers change their address, phone;
- ▶ 30% change their health plan, hospital or group affiliations,
- ▶ 5% change their status (license, sanctions, retirement)



Health Provider Directory



- ► MDCH leading effort to provide
 - LARA Provider Licensing and Sanction information
 - **▶**Enrolled Medicaid Provider data
 - ▶Provider information from other PH systems

Directory

- ▶Bureau of Labs
- **►**MCIR



□04/18/2013



Connectivity and Data Exchange



- The return of the acknowledgement message is a tenet of HIE with regard to the Assured Delivery Rule, that an HIE must be able to reliably message between source and destination and confirm delivery.
 - ▶ MDCH Data Hub and SOM systems are able to send acknowledgements for messages received thereby allowing downstream HIE Partners to reconcile transmission logs and have the ability to participate in problem resolution.

Current Production Capabilities



- HIE must provide the ability push a single record and selectively send data to comply with HIPAA
 - ► MCIR Receive Immunizations as of Feb 2013 10% of immunizations via HIE
 - ▶ Pre-production to receive from large pharmaceutical storefronts (Walgreens, CVS, Rite Aid, Walmart) - corporate feeds for adult immunizations via MiHIN
 - ▶ Pre-production for out of state via HISP (border states and beyond)
 - ► MDSS currently Receiving Electronic Reportable Labs from Utah Lab
 - ► MSSS Receive Syndromics May 2013

Query



- HIE must provide the ability to Query/Pull from other provider(s) as a single record
 - MCIR upgrades complete to support query
 - ▶ Currently in production within SOM the WIC system is able to query MCIR
 - ►MCIR Query Forecast/Query History developing plan for implementation

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MDCH Data Hub Design - Expandable beyond HIE



- ▶ Use Cases written for Bureau of Labs Send Lab Results - FY 2014 - dependency on HPD
- Future Use Case possibilities (beyond MU requirements) being explored
 - ▶ Newborn Pulse Oximetry Reporting
 - ► Health Plans use of HIE to query Michigan Automated Prescription System (LARA)
 - ▶ Receive Prior Authorization requests/information from EHRs into CHAMPS

Questions?

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MiHIN Shared Services

Tim Pletcher Executive Director



Michigan Health Information Network Overview



Brief History

- The Michigan Health Information Network (MiHIN) concept kicked off in April 2006 to create what became the Conduit to Care report.
- "convene Michigan's health care stakeholders to speed the adoption of health information technology and promote health information exchange"







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Conduit to Care-"a call to action for Michigan"





Tomorrow:

Move healthcare data out of distributed to authorized there all exchange atile health are dayin a content to wall

Phase B Aggregating Each Patient's Data for Care, Quality & I at Safety



Future:

Assemblia patient records nultiple sources for viewing patient history

Phase C Empowering Michigan Citizens



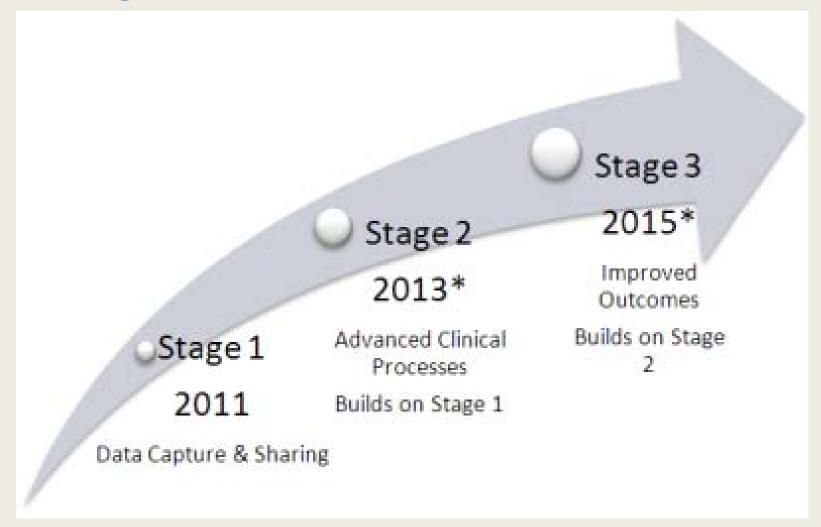
Goal:

"My personal health record." PHR is part of the overall network of information resources



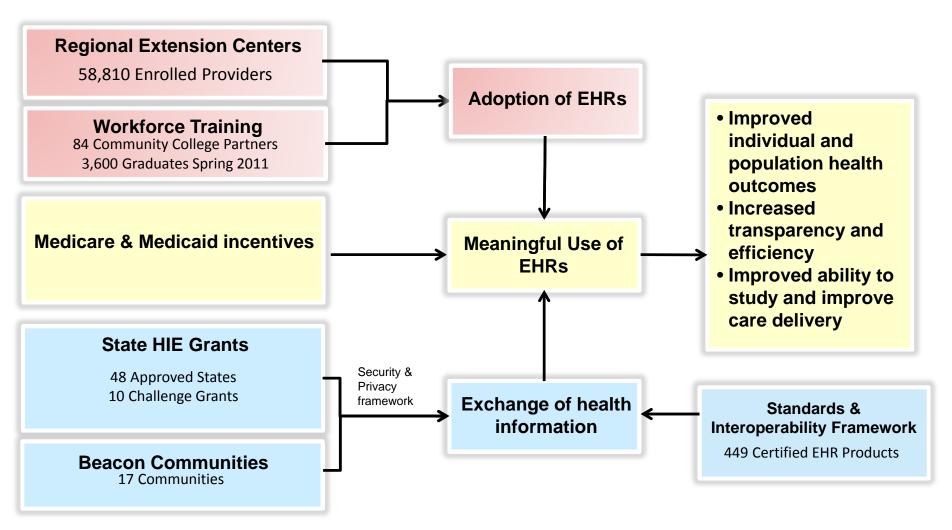


Meaningful Use of a Certified EHR

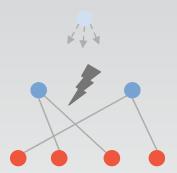




HITECH Invasion Strategy



Elevator

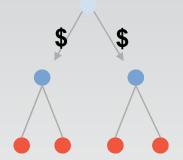


Rapid facilitation of directed exchange capabilities to support Stage 1 meaningful use

Preconditions:

- ✓ Little to no exchange activity
- ✓ Many providers and data trading partners that have limited HIT capabilities
- ✓ If HIE activity exists, no cross entity exchange

Capacitybuilder



Bolstering of sub-state exchanges through financial and technical support, tied to performance goals

Preconditions:

- ✓ Sub-state nodes exist, but capacity needs to be built to meet Stage 1 MU
- ✓ Nodes are not connected
- ✓ No existing statewide exchange entity

Orchestrator

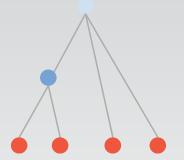


Thin-layer state-level network to connect existing sub-state exchanges

Preconditions:

- ✓ Operational sub-state nodes
- ✓ Nodes are not connected
- ✓ No existing statewide exchange entity
- ✓ Diverse local HIE approaches

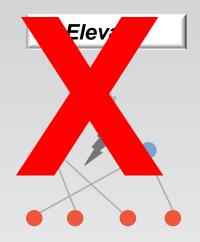
Public Utility



Statewide HIE activities providing a wide spectrum of HIE services directly to end-users and to sub-state exchanges where they exist Preconditions:

- ✓ Operational state-level entity
- ✓ Strong stakeholder buy-in
- ✓ State government authority/financial support
- ✓ Existing staff capacity





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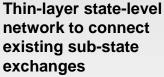
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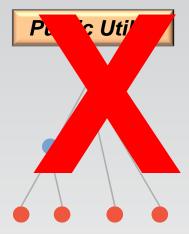
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Creation of MiHIN Shared Services

- The MiHIN Shared
 Services will be designed
 as a network of
 networks ...
- ...with local providers connecting to sub-state HIEs which connect to the MiHIN Shared Services"...
-and then to the National Health Information Network.







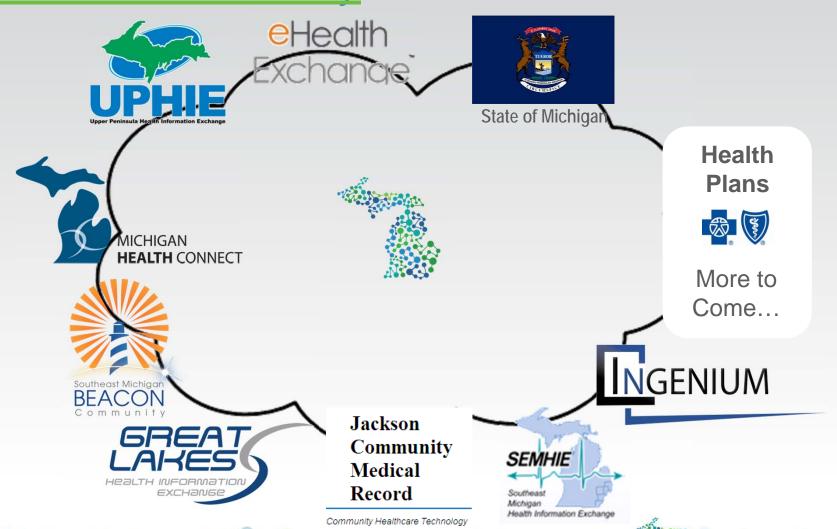


MU Aligned Statewide HIE Approach:

- employ a public-private model vs. only complete state control
- leverage public health & meaningful use
- promote the use of national standards & public transparency (via HIT commission)
- established a designated nonprofit entity to interconnect networks of networks (MiHIN Shared Services)
- relies on qualified health information organizations such as Michigan's seven sub-state HIEs to connect providers
- emphasize common data sharing use cases and multistakeholder participation (hospitals, physicians, health plans, state government)



MiHIN Community



MiHIN Shared Services

Legal Infrastructure for Data Sharing

ORGANIZATION AGREEMENT (QDSOA or VQDSOA)

Definitions

Basic Connection Terms

Basic BAA Terms

Minimal Operational SLA

Contracting & Payment

Cyber Liability Insurance

Termination

Data Sharing Agreement



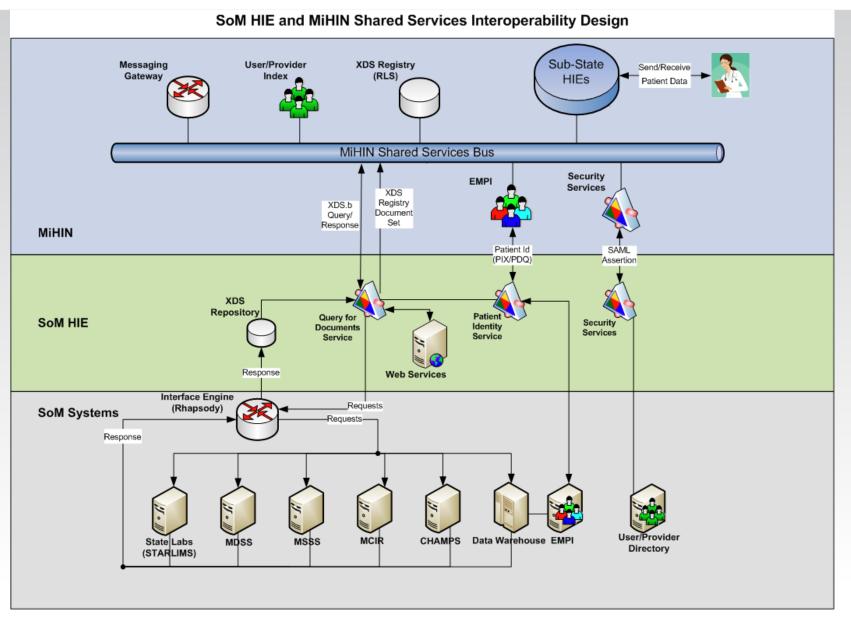






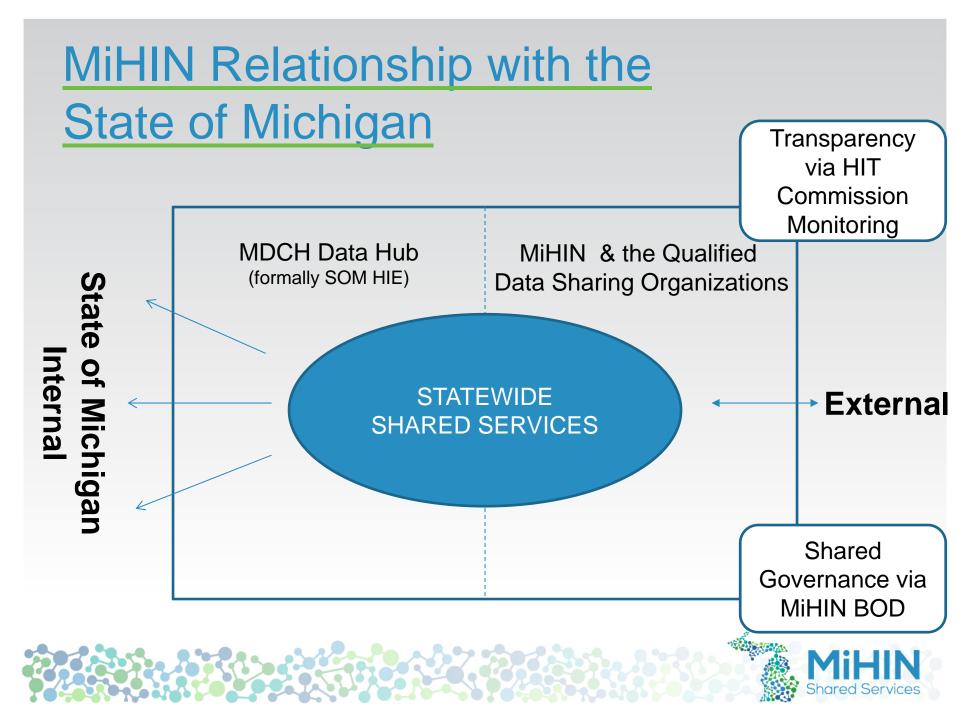








04/18/2013



Phase One Statewide Use Cases





Public Health Reporting



Health Provider Directory



Push Alerts & Notification



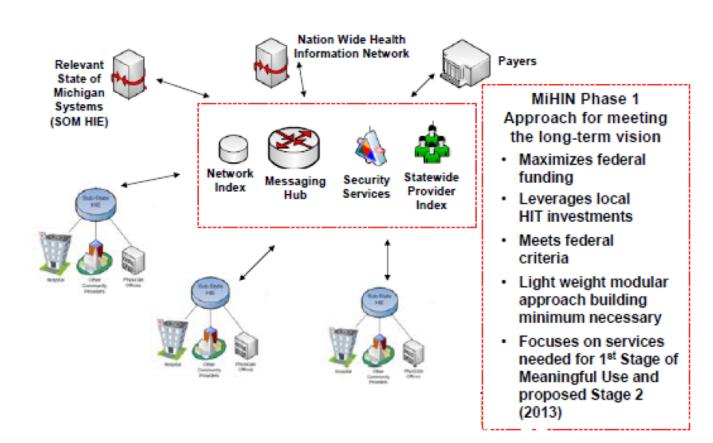
Pull/Query
Care Summaries





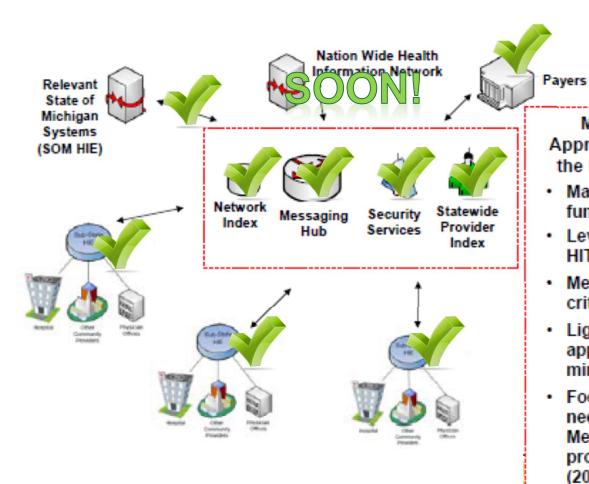
Phase One

MiHIN Shared Services Phase 1:





MiHIN Shared Services Phase 1:

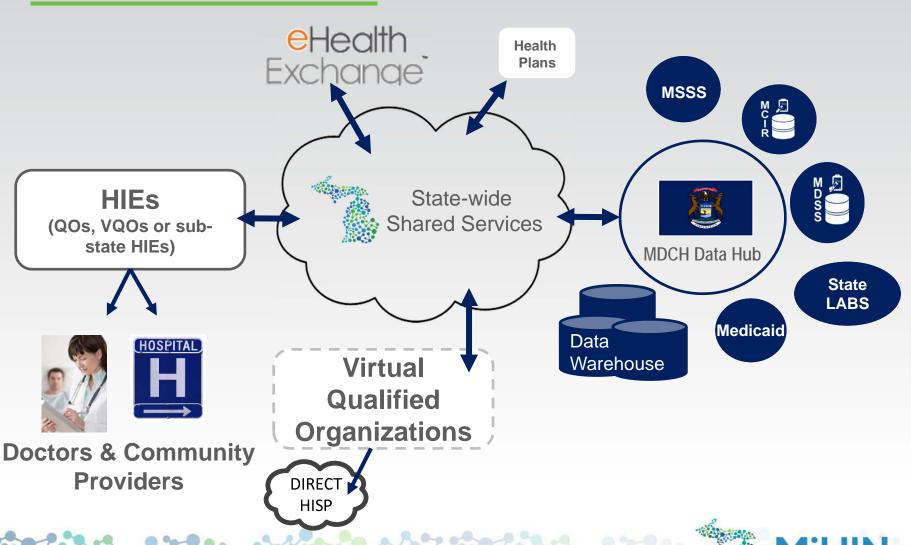


MiHIN Phase 1 Approach for meeting the long-term vision

- Maximizes federal funding
- Leverages local HIT investments
- Meets federal criteria
- Light weight modular approach building minimum necessary
- Focuses on services needed for 1st Stage of Meaningful Use and proposed Stage 2 (2013)



Basic Data Flow



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Public Health Reporting



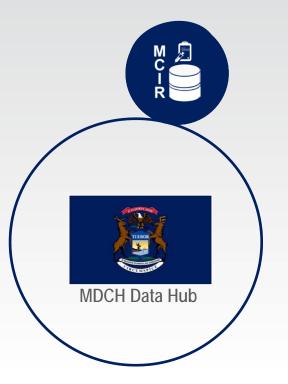






HIE (QOs, VQOs, substate HIEs, or via DIRECT)

State-wide Shared Services







Health Provider Directory



 Source of trusted provider information for secure routing and HIE information



Directory Services



- State-wide provider address book
 - Direct
 - Referrals
- Sets the stage for provider relationship management





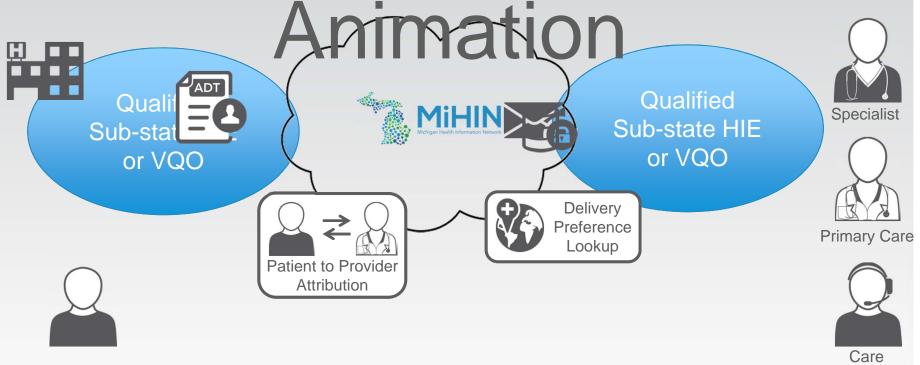




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Transition of Care Notification





- 1) Patient goes to the hospital, hospital sends a registration message
- 2) MiHIN checks for Patient to Provider Attribution and identifies three providers
- 3) Using the HPD, MiHIN identifies a Delivery Preference for each provider
- 4) Notification is routed to the providers based on their preference



Coordinator

Phase Two Statewide Use Cases





Public Health Reporting



Health Provider Directory



Push Alerts & Notification



Pull/Query Care Summaries





Phase II

- "Phase 2 will consist of continuing with the same approach of incrementally adding functionality
- by deploying more of the core infrastructure including: the completion of the Security Services (CONSENT)
- standing up an XDS Registry/Record Locator Service and the component required to implement the shared services bus.
- This will result in the sub-state HIEs being able to retrieve Immunization histories from MCIR
- and the transfer of Continuity of Care Documents (CCD) to physician offices and emergency departments."



Query Infrastructure

Registry



Repository





Building the State-wide Record Locator Service Community (QO/VQO) Reg try kep site y QO/VQO) Community Community (QO/VQO) (QO/VQO)

Query for Patient History



Animation





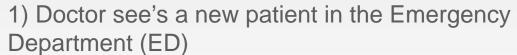


Patient Found

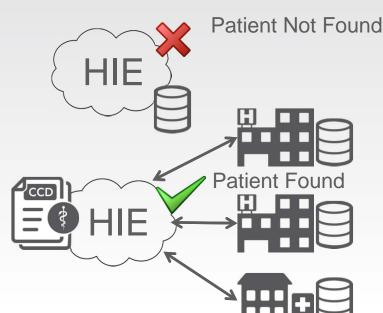




Patient Doctor



- 2) ED sends out a "patient discovery" request for information about the patient
- 3) Sources that know the patient respond
- 4) ED queries for patient clinical information
- 5) Sources respond with clinical document(s), typically CCDs





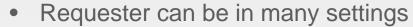
Query for Patient History



Animation

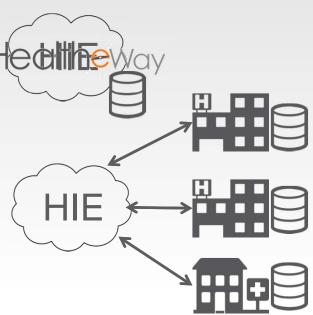


State-wide Record Locator Service



- Primary care provider
- Health plan doing eDetermination
- Out-of-state provider
- Federal agencies
- Responders can vary as well
 - State of Michigan
 - Federal agencies and out-of-state providers







Also Coming Up via Medicaid

- Mi-Way Consumer Directoryindividual patients can state their preferences for: emergency
 contact information; the primary location/s where their personal
 health information is located; the location/s where they want copies
 of their coded medical information sent; the location of their
 advanced directives or living will; profile editor preferences (e.g.
 custodian), providers to automatically notify; breach notification
 communication method preference, and their Opt Out Preferences
 related to non-Treatment Payment or Health Care Operations
 aggregations of the data (such as Accountable Care Organization
 participation or quality analysis, research, etc.).
- <u>Federated Identity Hub Pilot-Cross Organization-</u>"single sign on"), small service, legal agreements, and formal trust relationships to support reducing the number of passwords required.



9.4/18/2013

State IAPD Funding for HIE

- CMS believes that States have a role in promoting HIE to help transform other aspects of the Medicaid Program than just meaningful use
- A number of States have recently received millions of dollars from CMS for post ONC HIE funding (e.g. Maryland \$16.9 million)
- Some rules:
 - Costs divided equitably across other payers based upon the OMB-defined "fair share" principle
 - Costs appropriately allocated Activities leverage efficiencies with other Federal and State HIE funding
 - Activities that are developmental and time-limited HITECH 90% FFP is not for on-going HIE costs once operational
 - health plans may consider HIE costs as an allowable quality improvement activity to be reported as part of the 80-85% of premium revenue that must be devoted to clinical services and quality improvement (Medical Loss Ratio) HIE=Good!





Is Michigan's Current Strategy Working?

- Even though Michigan is already becoming a leading state in the country for HIE (verb), there is a long way to go.
- Progress has been slow because:
 - Most organizations are just now adopting Electronic Health Record (EHR) systems, so they are not ready or able to share data other than for simple results reporting
 - EHR vendors are often unwilling and/or bad at making data sharing a priority, cost effective, or easy
 - Until recently, incentives to share data across independent organization has been VERY weak or non-existent, so the value of HIE was perceived as low
 - The standards and technology are evolving very rapidly



How Can HIE be Accelerated in Michigan?

- Health plans can modify contracts to incentivize care coordination and streamline billing, quality assessment, and population health data reporting as routine output from the clinical process
- 2. Rapidly stand up the requisite necessary state-wide technology core services:
 - Health Provider Directory (Master Clinicians Index), Provider-Patient Attribution, Master Person Index, Record Locator Service, Patient Directory Services, and services for consent, security, or audit
- 3. Develop a robust set of understandable and high value Use Cases
- 4. Continue to encourage the existing qualified organizations to enhance their abilities to interoperate with the state-wide core services
- 5. Determine mechanisms to reduce the barriers presented by the costs of EHR vendor interfaces

MIHIN Shared Services

More information about MiHIN

Questions? WWW.MIHIN.ORG

Tim Pletcher pletcher@mihin.org

04/18/2013

Public Comment



04/18/2013

Adjourn

